

## ABSTRACT OF THE DISCLOSURE

An optical information apparatus of the present invention includes: an optical pick-up head including: a light source; a diffraction unit; a condensing unit; a beam splitter; a photodetector; and a tracking error signal  
5 generator. An optical recording medium has tracks arranged substantially at a constant pitch. An average of a pitch is  $tp$ . When a main beam is placed on the track, a first sub-beam and a second sub-beam are placed between the tracks. The tracking error signal generator performs a differential arithmetic operation with respect to signals output from a  
10 light-receiving portion receiving the main beam to generate a first push-pull signal, performs a differential arithmetic operation with respect to signals output from the light-receiving portions receiving the first sub-beam and the second sub-beam to generate a second push-pull signal, and performs a differential arithmetic operation with respect to the first push-pull signal and  
15 the second push-pull signal to generate a tracking error signal, in a case where an amplitude of the first push-pull signal obtained at the pitch  $tp$  is fluctuated when the light beam is scanned in a direction orthogonal to the tracks of the optical recording medium.